State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Natural & Historic Resources
Office of Engineering and Construction

JON S. CORZINE
Governor

LISA P. JACKSON
Commissioner

MEMORANDUM

TO: David Rosenblatt, Administrator

FROM: Benjamin Keiser
Benjamin Keiser, Manager

DATE: September 29, 2008

SUBJECT: Coastal Storm Survey & Damage Assessment
Impacts from the September 22 -28, 2008 Storm Activity

SUMMARY:

Increased storm activity in September continued as a non-tropical low pressure system adjacent to the North Carolina coast and nearby Hurricane Kyle directly and indirectly affected the region. These systems produced persistent onshore winds and increased wave activity from the mid-Atlantic region through New England from September 22 – 28, 2008.

The initial low pressure system formed along a stalled frontal boundary off of the North Carolina coast by Tuesday, September 23rd and slowly drifted to the northwest and then to the north by mid-week. Conditions deteriorated as the pressure gradient between this feature and the strong high pressure anchored over the northeastern United States and eastern Canada created a period of onshore winds and increased wave activity; the strongest effects along the New Jersey coastline were felt from Thursday, September 25th through Friday September 26th. A period of sustained winds as high as 38 miles per hour with gusts near 50 miles per hour was felt along the New Jersey coast, creating sea heights as high as 14 to 16 feet; as a result, surf heights were in the 5- to 9-foot range for much of the New Jersey, New York, and Delmarva coastlines. In addition, the approaching new moon and the increased wave activity from Hurricane Kyle, on September 27th and 28th, compounded the effects of this system.

The Bureau of Coastal Engineering conducted a survey of the New Jersey coastline on Monday, September 29, 2008, the results of which are included as part of this report. As this report was being compiled, waves continued to be in the 2- to 4-foot range, leaving the area with a moderate risk of rip currents through Tuesday, September 30, 2008.

A detailed summary listed by municipality from north to south follows this report.

Note: Wind data courtesy of the National Oceanic & Atmospheric Administration's National Data Buoy Center
Wave heights courtesy of Steven's Institute's Davidson Lab NJ Coastal Monitoring Network
Surge data courtesy of the National Oceanic & Atmospheric Administration's Meteorological Data Laboratory.

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Municipality	Beach Erosion	Dune Erosion	Notes
PERTH AMBOY	No erosion reported	No dune erosion reported	
SOUTH AMBOY	No erosion reported	No dune erosion reported	
OLD BRIDGE	No erosion reported	No dune erosion reported	
CLIFFWOOD BEACH	No erosion reported	No dune erosion reported	
KEYPORT	No erosion reported	No dune erosion reported	
UNION BEACH	No erosion reported	No dune erosion reported	
KEANSBURG	No erosion reported	No dune erosion reported	
BAYSHORE FLOODGATE	No erosion reported	No dune erosion reported	
PORT MONMOUTH	No erosion reported	No dune erosion reported	
BELFORD	No erosion reported	No dune erosion reported	
LEONARDO	No erosion reported	No dune erosion reported	
ATLANTIC HIGHLANDS	No erosion reported	No dune erosion reported	
HIGHLANDS	No erosion reported	No dune erosion reported	
SEA BRIGHT	1' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
MONMOUTH BEACH	1' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
LONG BRANCH	1' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
ELBERON	1' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
ALLENHURST	1' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
DEAL	1' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
LOCH ARBOUR	1' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
ASBURY PARK	2' to 3' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
OCEAN GROVE	2' to 3' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
BRADLEY BEACH	2' to 4' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
AVON BY THE SEA	2' to 4' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
BELMAR	1' to 2' high by 20' wide sloping cut was reported throughout the municipality	No dune erosion reported	
SPRING LAKE	Brown Ave.: 2' to 3' high by 40' wide sloping cut 2' to 3' high by 20' to 30' wide sloping cut was reported throughout the rest of the municipality	No dune erosion reported	
SEA GIRT	2' to 3' high by 30' to 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
MANASQUAN	Inlet: 2' to 4' high by 20' wide sloping cut 2' to 4' high by 40' wide sloping cut was reported throughout the rest of the municipality	No dune erosion reported	

Municipality	Beach Erosion	Dune Erosion	Notes
POINT PLEASANT	2' to 4' high by 50' wide sloping cut was reported throughout the municipality	No dune erosion reported	
BAYHEAD	2' to 4' high by 45' wide sloping cut was reported throughout the municipality	No dune erosion reported	
MANTOLOKING	2' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
LAVALLETTE	2' to 4' high by 25' wide sloping cut was reported throughout the municipality	No dune erosion reported	
TOMS RIVER	Channel Way to Kittywake Ave: 2' to 3' high by 20' wide sloping cut	No dune erosion reported	
	Atlantic Ave to 5th Ave.: 2' to 4' high by 40' wide sloping cut		
BRICK	2' to 4' high by 45' wide sloping cut was reported throughout the municipality	No dune erosion reported	
ORTLEY BEACH	2' to 4' high by 50' wide sloping cut was reported throughout the municipality	No dune erosion reported	
SEASIDE HEIGHTS	Herring Ave.: 2' to 4' high by 100' wide sloping cut	No dune erosion reported	
	2' to 4' high by 40' wide sloping cut was reported throughout the rest of the municipality		
SEASIDE PARK	3' to 4' high by 50' wide sloping cut was reported throughout the municipality	No dune erosion reported	
BARNEGAT LIGHT	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
LOVELADIES	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
HARVEY CEDARS	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
NORTH BEACH	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
SURF CITY	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
SHIP BOTTOM	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
LONG BEACH TOWNSHIP	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
BRANT BEACH	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
BEACH HAVEN	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
HOLGATE	3' to 4' high by 40' wide sloping cut was reported throughout the municipality	No dune erosion reported	
BRIGANTINE	2' high by 40' wide sloped erosion the length of the promenade.	No dune erosion reported	Rocks exposed
	1' to 1.5' high by 100' wide was reported for the rest of the municipality		Lagoon Ave outfall pipe exposed

Municipality	Beach Erosion	Dune Erosion	Notes
ATLANTIC CITY	1' to 2' flat cut was reported throughout the municipality	No dune erosion reported	
VENTNOR	1' high by 20' wide sloped erosion was reported throughout the municipality	No dune erosion reported	
MARGATE	1' to 2' flat cut was reported throughout the municipality	No dune erosion reported	
LONGPORT	1' flat cut was reported throughout the municipality	No dune erosion reported	
OCEAN CITY	14th to Pennylyn Ave - 2' high by 60' wide sloping cut	No dune erosion reported	Outfall and Jetty exposed
	Surf Ave. to Bridge Ave - 2' high by 30' wide jagged vertical cut		
STRATHMERE	1' to 2' sloped cut by 45' in width entire length of municipality	500 cubic yards from the corner of the dune are missing.	29 Seaview - backyard bulkhead collapsed
		Winthrop Ave. to Williams Ave - 4' - 5' cut in dune	
WHALE BEACH	1' - 1.5' by 35' sloped erosion reported	3' high by 2' wide cut to dune the entire length of municipality	
SEA ISLE CITY	1' high by 50' wide sloped erosion was reported the entire length of the municipality	1st to 29th St. - 2' high by 3' wide cut in dune the entire length of municipality	
		29th to 33rd St. - 3' high by 5' wide dune cut was reported	
		54th to 93rd St. - 1' high by 2' wide dune cut was reported	
AVALON	10th to 15th St. - 3' high by 70' wide sloped erosion	12th to 15th St. - 6' high by 12' wide dune cut was reported	
	22nd to 79th St. - 1.5 high by 50' sloped erosion in the velocity zone	15th to 22nd St. - 4' high by 6 wide dune cut was reported	
STONE HARBOR	1' to 1.5' high by 40' wide sloped erosion was reported the entire length of the municipality	108th to 111th St. - 2'to 3' high by 4' wide cut	
NORTH WILDWOOD	1' to 2' high by 35' wide sloped erosion was reported the entire length of the municipality	inlet beach dune - 65' long by 4' high by 3' wide cut in dune	
WILDWOOD CREST	1' to 2' high by 65' to 75' wide sloped erosion was reported the entire length of the municipality	No dune erosion reported	Forebeach ponding
WILDWOOD	1' to 2' high by 65' to 75' wide sloped erosion was reported the entire length of the municipality	No dune erosion reported	
CAPE MAY CITY	1' to 1.5' high by 25' wide sloped erosion was reported the entire length of the municipality	No dune erosion reported	
CAPE MAY POINT BOROUGH	1' to 1.5' high by 25' wide sloped erosion was reported the entire length of the municipality	No dune erosion reported	
DELAWARE BAY	Little impact due to wind direction. No noticeable erosion	No dune erosion reported	